

TECHNICAL PROTOCOLE

PUR OXYGENE ACTIVE POLLUTION PROTECT



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Today, atmospheric pollution represents a significant environmental health risk across the world, as recognised by the WHO (World Health Organisation).

Our skin represents this aggressor's first and principal target, acting as a physical, chemical and immunological barrier against pollutants.

Ever-increasing pollution causes a dysfunction in this skin barrier, resulting in a weakening of its microbiota, dehydration, and an increase in sebaceous secretions. This daily aggression can also result in exacerbated pigmentation, with the appearance of dark spots and a dull complexion.

These pollutants not only remain on the surface of the skin, but can diffuse into its deeper layers. As a result, repeated exposure to fine particles, polycyclic aromatic hydrocarbons, volatile organic compounds and oxides increases the risk of skin pathologies and worsens skin sensitivity and reactivity by increasing oxidative stress. The impact of sunlight, in combination with air pollution, significantly worsens skin damage and accelerates aging.

In fact, exposure to light – and blue light in particular – also causes oxidative stress in the skin. This aggression is further increased by atmospheric pollutants such as polycyclic aromatic hydrocarbons and, in particular, benzo[a]pyrene.



Conscious of this problem – which is not limited to urban populations and instead concerns the whole of modern society – ERICSON LABORATOIRE offers a comprehensive range of professional and home treatments to fight against the skin damage caused by pollution when associated with harmful exposure to blue light.

PUR OXYGENE allows us to cover a broad spectrum of anti-pollution protection and slow the structural and visual aspects of skin aging induced by pollution, combined with the harmful effects of blue light, by modulating the various cellular pathways involved.

PUR OXYGENE skincare range provides 3 specific axes :

- DETOXIFY the skin of impurities that limit its optimal functioning.
- REINFORCE cell metabolisms, slowed down by the number of pollutants increasingly harmful.
- PROTECT cell functions from oxidative stress generated by the various polluting substances potentiated by photo-pollution.

THE DIFFERENT TYPES OF POLLUTION



Air is a fundamental and indispensable element for all living beings. As such, every day, we breathe in around 20 m³ of air. In the 1980s, this was discussed mainly in terms of heavy-metal pollution and acid rain. Today, other pollutants have been identified and can now also be quantified.

They are more harmful because of their structure and their small size; they are indeed much more easily absorbed by the skin.

PM are fine particles – whether solid or liquid – transported by air or water at concentrations that regularly exceed the limits recommended by the WHO.

There are two main types of particles:

- PM_{10} : particulate matter 10 µm in diameter or less.
- $\text{PM}_{2.5}$: fine particulate matter 2.5 μm in diameter or less, smaller than that of skin pores.

These may be the pollutants that worry health professionals the most, as they can penetrate the skin very easily. They generate oxidative stress and are therefore responsible for skin aging, while also participating in the appearance of dark spots.

EFFECTS OF POLLUTION IN THE SKIN



The means of various pollutants' penetration differs according to:

- The type of pollutant,
- The skin type,
- Skin integrity.

Pollutants have a direct impact on the appearance and aggravation of skin pathologies such as redness, sensitivity, acne, eczema and psoriasis, etc.

IN THE EPIDERMIS

Pollutants modify the barrier function, in other words, the metabolism of the lipids forming the stratum corneum and the components of corneocyte protein. Particles penetrate via the intercellular route as molecules cross the stratum corneum via the intercellular lipids and bypass the corneocytes. As a result, lipophilic and small pollutants are those that penetrate the most.

Exposure to pollution has a direct impact on the epidermis and causes an imbalance which manifests as redness, dehydration, and eczema, or through over-pigmentation.

Consequently, this interferes with lipids, DNA and proteins in the skin via oxidative damage. Pollution reduces the effect of the skin's protective barrier function by destroying the hydrolipidic film. It slows cell renewal and increases the skin's sensitivity and reactivity, while pollutants also induce oxidative stress and inflammation by stimulating the production of pro-inflammatory cytokines, thereby causing feelings of discomfort (tingling, redness, warmth and dryness). Sensitive skin is more common in industrialised countries.

Furthermore, follicular ostia may dilate, stimulating the production of sebum. The skin therefore appears shiny on the surface and suffers from intense dehydration. The epidermis becomes unbalanced, the skin appears duller and less radiant.

IN THE DERMIS

Pollution causes the skin to age prematurely by increasing the production of free radicals which destroy cells and cause the destruction of collagen and elastin fibres.

When the skin comes in contact with pollutants, an oxidative chain reaction takes place. Collagen is degraded by collagenases, and elastin by elastases. These various alterations lead to the appearance of wrinkles and the degradation of the different fibres within the extracellular matrix.

After daily attacks from pollutants, cells activate their defence system and become exhausted in this fight, leading to deficiencies in vitamin E and C: the main antioxidants within the skin.

The production of endogenous antioxidants (such as superoxide dismutase or catalase and glutathione, etc.) is also compromised, as the heavy metals involved in the constitution of pollutants prevent their synthesis.



POTENTIATED ACTION BETWEEN SUN AND POLLUTION

Leading scientific studies have agreed that environmental pollution accelerates skin aging, with dermatologists explaining that 80% of this is linked to the pollution in combination with solar exposure.

The way in which the sun's rays affect the skin depends on their wavelength – the shorter this is, the more aggressive the rays will be, as they have higher energy levels.

UV radiation is all the more dangerous the thinner the ozone layer becomes.

Visible light (400nm - 700nm) and infrared rays (700nm - 1mm) should not be ignored; they are also capable of generating oxidative stress.

Visible light penetrates deeply and can reach the hypodermis. It can also lead to the formation of Reactive Oxygen Species.

Visible light in the skin causes the production of inflammatory interleukin cytokines (IL-1, IL-6, IL-8) and increases the expression of metalloproteinases as MMP-1 and 9. It is also capable of generating hyperpigmentation with skin phototypes IV and V, and can aggravate the pregnancy mask in all phototypes. Blue light is part of visible radiation, and carries the highest energy in this spectrum.

This category of light is also emitted by certain types of devices, such as, for example, computers, tablets, televisions and mobile phones. They have all been recognised as being able to emit fluorescent light via an electro-luminescent diode (DEL or LED: light-emitting diode), with an influence on photo-aging that is not negligible.

As blue light increases oxidative stress within the epidermis, this stimulates melanocytes, which respond to this aggression by increasing the production of melanin, thereby promoting the formation of pigment spots. In the dermis, this accelerates the degradation of glycoproteins within the extracellular matrix, resulting in an amplification of skin aging.

LIGNACELL: global skin protection against environmental pollution



As a result of a global and innovative approach, it is now possible to limit cellular disorders induced by pollutants in and on the skin. LIGNACELL is a biotechnology active ingredient extracted from a plant used in traditional Chinese medicine: Schisandra Chinensis. Lignans are molecules recognised for their ability to protect vitamins and enzymes, as well as preventing the oxidation of lipids, making them powerful natural antioxidants.

They are highly adaptogenic against environmental attacks when faced with external aggressions or various climatic stresses. Lignans, major constituents of Schisandra Chinensis, therefore offer antioxidant, anti-inflammatory and detoxifying properties by activating the endogenous defence mechanisms of biological pathways.

IN VITRO & IN VIVO TESTS

LIGNACELL, a second-generation anti-pollution active ingredient, protects the skin thanks to four global actions: at a molecular, cellular, tissue and organic level.



1-LIGNACELL LIMITS INFLAMMATORY RESPONSES

Study of the protective effect of LIGNACELL on inflammatory responses by quantifying the release of pro-inflammatory mediators IL-6 and PGE2. IL-6 is a pro-inflammatory cytokine involved in the

inflammatory response.

PGE2 is a pro-inflammatory mediator involved in the appearance of heat and skin redness.

As shown in the diagram, LIGNACELL significantly reduces the sensitivity and inflammatory skin phenomena.

2-LIGNACELL STRENGTHENS OXYGENATION AND SKIN MICRO-CIRCULATION



LIGNACELL induces an increase in microcirculation from D7 to D21 compared to placebo, with a significant increase of 33% on D14. As a result, it improves tissue oxygenation by increasing microcirculation.

Better oxygenated, the skin cells can once again fulfil their roles in providing better skin dynamics.

LIGNACELL protects against prolonged exposure to pollution; it improves hydration, preserves the uniformity of the complexion, increases luminosity and radiance, and reduces the intensity of pigment spots after 21 days of exposure to pollution.

LIGHT'ENSIS: global skin protection against photo-pollution



LIGHT'ENSIS is an active ingredient obtained via biotechnology from an extract of Montpellier cistus (Cistus monspeliensis). This plant has been selected as a result of its major natural adaptogenic power in protecting against light.

Its high concentration of flavonoids, including myricetin glucosides, offers this potency in terms of protection against UV radiation, pollutants, and blue light.

LIGHT'ENSIS prevents cell death and lipoperoxidation, promoting recognised antiinflammatory protection.

It has also been proven to be effective in combatting photo-aging and DNA damage and protecting pro-collagen 1 and collagen fibres.

TESTS IN VITRO & IN VIVO

1- PROTECTION AGAINST SKIN DAMAGE CAUSED BY BLUE LIGHT



Accumulated exposure to blue light from the sun or electronic devices can have adverse effects on the skin, particularly in the dermis, which can lead to premature aging and the appearance of wrinkles.

The aim of the study was to evaluate the protective effect of LIGHT'ENSIS on the dermis against blue light, by quantifying the level of MMP1 in in-vitro human skin biopsies, subsequently confirmed during in-vivo tests.

LIGHT'ENSIS decreases the production of the extracellular matrix protease MMP1 in skin explants and thus limits the degradation of skin collagen.

- Inhibition of synthesis of MMP1 matrix-degrading enzymes: decreased by up to 43%



After 28 days application of LIGHT'ENSIS, roughness in the skin is significantly decreased, as well as the depth of wrinkles, by 6% and 9% respectively – compared to the placebo – demonstrating smoothing and filling effects in wrinkles.

LIGHT'ENSIS helps repair damage created by cumulative daily photo-aggressions. The reduction of induced oxidative stress promotes the reset function at the level of cellular metabolism. The skin micro-relief is smoothed, wrinkles and fine lines are reduced, the skin regains suppleness and firmness.

SYNERGY OF TWO INNOVATIVE INGREDIENTS

Two innovative protective shield active ingredients to provide protection against different types of environmental aggression while helping the skin to develop resilience and resistance to oxidative stress. They thus provide protection against photo-pollution and pollu-aging.



PUR OXYGENE ACTIVE POLLUTION PROTECT

Aware of the ever-increasing demand for products that protect against skin-aging accelerators (pollution associated with UV rays and blue light), our laboratories have developed a comprehensive treatment providing a global solution for these various daily aggressions. Detoxified, repaired, protected and stimulated, the skin can once again fully perform all of its functions.

Indeed, any professional care can only be carried out on skin free of toxins and pollutants which congest it and slow its functioning.

Complete skin care with a 'skin reset' approach helps to recreate the optimal conditions for healthy and resilient skin. It will no longer exhaust itself fighting exclusively against radical attacks to the detriment of the implementation of natural cell regeneration processes.

ESSENTIAL CARE	SKIN SPECIFICS	AGE EXPERTISE
BIOLOGIC DEFENSE	BIOPTIC	GENXSKIN
HYDRA CLINIC	ACTI-BIOTIC	SLIM FACE LIFT
PUR OXYGENE	VITAMIN ENERGY	SKINJEXION
	ENZYMACID	SUPREME

It should always be kept in mind that the skin is an organ that acts in connection with a range of physiological parameters. It is therefore essential to logically develop the various stages essential to establish the client's personalised treatment in order to ensure the intended result.

HOME SKINCARE PRODUCTS RANGE

	ERICSON			ERICSON
				LABORATOIRE PARIS
PUR CXYVE Petros Petros Petros Bern Boucher gaba (Pa) Pigged Balana anun	PUR OVYOENE Anterioris One university Area contrastructure Area contrast	ERECSON LABORDOR FARS PUR OVVERIE Active food information Active food information Breast rate from enclosed	LABORATORE PARI ACTORE PARIS ACTORE POLICIPACIONE ACTORE POLICIPACIONE POLICIPACIONE CARGENICACIÓN POLICIPACIONES CARGENICACIÓN	PUR OXYGENE Active in Littory D-Toe version & mataue D-Toe versio & mask
E127	E128	E129	E130	E131
E127	PPM GLOBAL DEFEN	SE SERUM	30 ml	
E128	ANTI-ASPHYXIATION	N TONING GEL	50 ml	

E129	STRESS-RELIEF LIGHT EMULSION	50 ml
E130	PRO-RECOVERY COMFORT CREAM	50 ml
E131	D-TOX SCRUB & MASK	50 ml

PROFESSIONAL SKINCARE PRODUCTS RANGE



E116	KIT 4 SESSIONS :			
	E117	PPM GLOBAL DEFENSE SERUM	2,5 ml x 4	
	E118	R.O.S BALANCE D-TOX POWDER MASK	26,4 g x 4	
	E119	R.O.S BALANCE SOLUTION CONCENTRATE	30 ml x 4	
	E120	STRESS-RELIEF LIGHT EMULSION	2 ml x 4	
	E121	PRO-RECOVERY COMFORT CREAM	50 ml x 1	



PUR OXYGENE SKIN CARE LINE

PRODUCTS	FUNCTIONS	ACTIVE INGREDIENTS & ACTIONS
PPM GLOBAL DEFENSE SERUM RETAIL: 30ml bottle Ref. E127. PROFESSIONAL USE: 2.5ml ampoule x 4 Ref. E117 in professional 4-session kit Ref. E116.	 Corrects the effects of toxic particles from pollution on the skin. Revitalises asphyxiated and weakened skin. <u>Directions for use</u>: Apply the serum prior the recommended cream, to perfectly cleansed skin morning and/or evening. 	 LIGNACELL : global anti-pollution, anti-oxidant and anti-inflammatory protection. LIGHT'ENSIS : protects and repairs the skin from the photo-pollution damages. ACEROLA EXTRACT: anti-oxidant, skin regeneration. ROSEMARY EXTRACT: soothing and regenerating properties.
ANTI-ASPHYXIATION TONING GEL RETAIL: 50ml tube Ref. E128.	 A real bath of freshness for the skin, this melting gel reduces signs of fatigue. <u>Directions for use</u>: Apply morning and/or evening after the recommended serum. 	 LIGNACELL / LIGHT'ENSIS GINGER EXTRACT: anti-oxidant and energizing effects. GINSENG EXTRACT: invigorating and repairing properties.
STRESS-RELIEF LIGHT EMULSION RETAIL: 50ml jar Ref. E129. PROFESSIONAL USE: 2ml sachet x 4 Ref. E120 in professional 4-session kit Ref. E116.	 Light and non-greasy emulsion which awakens the complexion. Provides a feeling of soothing and a perfect matt finish. <u>Directions for use</u>: Apply morning and/or evening after the recommended serum. 	 LIGNACELL / LIGHT'ENSIS JOJOBA OIL: nourishing, anti-aging properties. SAGE EXTRACT: revitalizing and anti-free radical effects. SILICA: mattifying, soft focus effect.
PRO-RECOVERY COMFORT CREAM RETAIL: 50ml jar Ref. E130. PROFESSIONAL USE: 50ml tube Ref. E121 in professional 4-session kit Ref. E116.	 Revitalises weak and dull skin. Its generous texture recharges the skin with nourishing and regenerating substances to restore comfort and radiance. Energises dull and tired skin. <u>Directions for use:</u> Apply morning and/or evening after the recommended serum. Apply with an oxygenating massage, during professional treatment. 	 LIGNACELL / LIGHT'ENSIS CALENDULA OIL: soothing, provides softness and elasticity. SHEA BUTTER: skin regeneration properties. JOJOBA OIL: calming and restorative effects. ALOE VERA: repairing, soothing and moisturizing properties. SEA BUCKTHORN OIL: stimulates skin repair mechanisms.
D-TOX SCRUB & MASK RETAIL: 50ml tube Ref. E131.	 Soft clay mask combining the exfoliating action of silica grains with the detoxifying action of phyto-extracts. <u>Directions for use</u>: Apply to the face and neck, exfoliate with light circular movements for two to three minutes. Then leave on for 10 minutes as a detoxifying mask. Rinse off with water and lotion. Once or twice a week. 	 LIGNACELL / LIGHT'ENSIS IRIS PHYTAMIS: soothing and restructuring effects. BURDOCK EXTRACT: anti-oxidant, purifying effects. ESSENTIAL OILS : Sweet orange: rebalancing and soothing Rosemary: detoxifying and restorative Geranium: invigorating and purifying Lavender: restorative and soothing SILICA: mattifying, soft focus effect.
R.O.S BALANCE D-TOX POWDER MASK PROFESSIONAL USE: 26.4g sachet x 4 Ref. E118 in professional 4-session kit Ref. E116.	 Enriched with pure and soft clay, the R.O.S BALANCE D-TOX POWDER MASK acts as true mineral blotting paper. It absorbs and removes impurities from the skin. Skin energiser. <u>Directions for use</u>: Mix one sachet of R.O.S BALANCE D-TOX POWDER MASK in a cup with one sachet of R.O.S BALANCE SOLUTION CONCENTRATE E119. 	 KAOLIN: absorbent and purifying. RICE POWDER: gentle exfoliant, anti-free radical effect. DIATOMACEOUS EARTH: remineralizing and detoxifying properties. GOJI EXTRACT: anti-oxidant and regenerating.
R.O.S BALANCE SOLUTION CONCENTRATE PROFESSIONAL USE: 30ml sachet x 4 Ref. E119 in professional 4-session kit Ref. E116.	 As a result of its richness in active ingredients, R.O.S BALANCE SOLUTION CONCENTRATE provides a comprehensive and revitalising antioxidant effect. <u>Directions for use</u>: Mix one sachet of R.O.S BALANCE D-TOX POWDER MASK E118 in a cup with one sachet of R.O.S BALANCE SOLUTION CONCENTRATE. 	 LIGHT'ENSIS : protects and repairs the skin from the photo-pollution damages. CURCUMA EXTRACT: anti-oxidant, protective effect. WHITE TEA EXTRACT: anti-oxidant. WILD PANSY EXTRACT: calming and moisturizing effect. MENTHOL: freshness effect, facilitates absorption of active ingredients.

PUR OXYGENE PROFESSIONAL PROTOCOLE

Helps protect the skin from the various forms of pollution that weaken the skin barrier and accelerate premature aging. Its global anti-pollution technology helps repair visible damage caused by environmental aggressions. Improved protection from oxidative stress on a daily basis, the skin glows with radiance and health.

	DETOXIFY	REINFORCE PROTECT	
	TRE	4-SESSION TREATMENT ATMENT FREQUENCY: ONCE A WEEK	
9	E149 ERICSON ERICSON ERICSON	MAKEUP REMOVAL – CLEANSING STEP Select the SEBO-SAVON E151 or the BIO-RESPECT CLEANSING MILK E149 according to the skin needs. Rinse with water and the BIO-RESPECT CLEANSING LOTION E150.	8 min.
2		EXFOLIATION STEP Select one of the 3 scrubs: PERFECT SURFACER E144 - DERMA GUM E145 or CLINICAL PEELING E146 - Rinse with water and the BIO-RESPECT CLEANSING LOTION E150.	10 min.
6		SERUM APPLICATION Apply the entire vial of PPM GLOBAL DEFENSE SERUM E117 to the face and neck.	2 min.
4	E121	MASSAGE Apply PRO-RECOVERY COMFORT CREAM E121 and perform an oxygenating massage.	15 min.
5	E118 E119 ERICSON ERICSON	MASK PREPARATION Mix one sachet of R.O.S BALANCE D-TOX POWDER MASK E118 and one sachet of R.O.S BALANCE SOLUTION- CONCENTRATE E119. Fold the gauze in half, make a cutout to free the nose and two notches at the base of the neck to ease the gauze application.	б min.
6	EZCA	MASK APPLICATION Apply a first layer of mask, and two cotton pads soaked in BIOPTIC SOOTHING LOTION E234 on the eyes. Apply the gauze, then a second layer of mask.	20 min.
7	EIEO	MASK REMOVAL Remove the gauze, clean the face and neck with damp sponges, then with cotton pads soaked in BIO-RESPECT CLEANSING LOTION E150.	10 min.
8	E120	CREAM APPLICATION Apply the STRESS-RELIEF LIGHT EMULSION E120 to the entire face and neck.	б min.